

AMENDMENTS TO THE CLAIMS

- 1. (Original)** A method of making a wear-resistant element, comprising:

 - shaping and sintering a material into a compact using iron-based alloy powder containing Cr; and
 - conducting a nitriding treatment having no carburizing action to the compact, thereby causing a surface of the compact to have a mixed structure of an Fe-Cr-N compound layer, an Fe-Cr-N diffused layer, and a matrix.

- 2. (Original)** A method of making a wear-resistant element, comprising:

 - shaping and sintering a material into a compact using alloy powder in which at least one metallic element selected from Mn, Ti and V is contained in iron-based alloy powder containing Cr; and
 - conducting a nitriding treatment having no carburizing action to the compact, thereby causing a surface of the compact to have a mixed structure of an Fe-Cr-N compound layer, an Fe-Cr-N diffused layer, and a matrix.

- 3. (Original)** The method according to claim 1 or 2, wherein the compact has pores formed in the surface thereof, the Fe-Cr-N compound layer being formed at locations adjacent the pores, the mixed structure of the Fe-Cr-N diffused layer and the matrix being formed at locations remote from the pores.

- 4. (Original)** A method of making a wear-resistant element, comprising:

 - shaping and sintering a material into a compact using iron-based alloy powder containing Cr; and
 - conducting a nitriding treatment having no carburizing action to the compact, thereby causing a surface of the compact to have a mixed structure of an Fe-Cr-N compound layer, an Fe-Cr-N diffused layer, and a matrix of a sorbite structure.

- 5. (Original)** The method according to claim 4, wherein the compact has pores formed in the surface thereof, the Fe-Cr-N compound layer being formed at locations adjacent the pores, the mixed structure of the Fe-Cr-N diffused layer and the matrix of the sorbite

structure being formed at locations remote from the pores.

6. (Original) A method of making a wear-resistant element, comprising:

shaping and sintering a material into a compact using iron-based alloy powder containing Cr;

quenching and tempering the compact;

conducting a nitriding treatment having no carburizing action to the compact; and

partially removing a surface of the compact, thereby causing the surface of the compact to have a mixed structure containing at least an Fe-Cr-N compound layer.

7. (Currently Amended) The method according to ~~any one of claims 1 to 6~~claim 1, further comprising conducting an atmospheric treatment to the compact before the nitriding treatment.

8. (Original) The method according to claim 7, wherein the atmospheric treatment is conducted at a temperature of 380°C or more.

9. (Original) A wear-resistant element comprising:

a sintered and nitrided material having a surface; and

a mixed structure of an Fe-Cr-N compound layer, an Fe-Cr-N diffused layer, and a matrix formed in the surface of the sintered and nitrided material,

wherein the surface of the sintered and nitrided material is entirely covered with grains or protrusions of 0.1~0.5 μ m.

10. (New) The method according to claim 2, further comprising conducting an atmospheric treatment to the compact before the nitriding treatment.

11. (New) The method according to claim 3, further comprising conducting an atmospheric treatment to the compact before the nitriding treatment.

12. (New) The method according to claim 4, further comprising conducting an atmospheric treatment to the compact before the nitriding treatment.

13. (New) The method according to claim 5, further comprising conducting an atmospheric treatment to the compact before the nitriding treatment.

14. (New) The method according to claim 6, further comprising conducting an atmospheric treatment to the compact before the nitriding treatment.

15. (New) The method according to claim 10, wherein the atmospheric treatment is conducted at a temperature of 380°C or more.

16. (New) The method according to claim 11, wherein the atmospheric treatment is conducted at a temperature of 380°C or more.

17. (New) The method according to claim 12, wherein the atmospheric treatment is conducted at a temperature of 380°C or more.

18. (New) The method according to claim 13, wherein the atmospheric treatment is conducted at a temperature of 380°C or more.

19. (New) The method according to claim 14, wherein the atmospheric treatment is conducted at a temperature of 380°C or more.